Juerg Leuthold

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60 480 20,955 137 h-index g-index citations papers 686 26,466 6.64 5.7 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
480	Magnetism from conductors and enhanced nonlinear phenomena. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 1999 , 47, 2075-2084	4.1	5541
479	Nonlinear silicon photonics. <i>Nature Photonics</i> , 2010 , 4, 535-544	33.9	773
478	Wireless sub-THz communication system with high data rate. <i>Nature Photonics</i> , 2013 , 7, 977-981	33.9	726
477	All-optical high-speed signal processing with silicon Brganic hybrid slot waveguides. <i>Nature Photonics</i> , 2009 , 3, 216-219	33.9	597
476	Subdiffraction resolution in far-field fluorescence microscopy. <i>Optics Letters</i> , 1999 , 24, 954-6	3	591
475	PHASAR-based WDM-devices: Principles, design and applications. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 1996 , 2, 236-250	3.8	509
474	High-speed plasmonic phase modulators. <i>Nature Photonics</i> , 2014 , 8, 229-233	33.9	376
473	26 Tbit s¶ line-rate super-channel transmission utilizing all-optical fast Fourier transform processing. <i>Nature Photonics</i> , 2011 , 5, 364-371	33.9	364
472	Coherent terabit communications with microresonator Kerr frequency combs. <i>Nature Photonics</i> , 2014 , 8, 375-380	33.9	358
471	All-plasmonic Machizehnder modulator enabling optical high-speed communication at the microscale. <i>Nature Photonics</i> , 2015 , 9, 525-528	33.9	327
470	Error Vector Magnitude as a Performance Measure for Advanced Modulation Formats. <i>IEEE Photonics Technology Letters</i> , 2012 , 24, 61-63	2.2	312
469	Nonlinear silicon-on-insulator waveguides for all-optical signal processing. <i>Optics Express</i> , 2007 , 15, 597	6 3 9 ₉ 0	289
468	High-speed low-voltage electro-optic modulator with a polymer-infiltrated silicon photonic crystal waveguide. <i>Optics Express</i> , 2008 , 16, 4177-91	3.3	226
467	100 GHz siliconBrganic hybrid modulator. <i>Light: Science and Applications</i> , 2014 , 3, e173-e173	16.7	198
466	Low-loss plasmon-assisted electro-optic modulator. <i>Nature</i> , 2018 , 556, 483-486	50.4	186
465	Photonic wire bonding: a novel concept for chip-scale interconnects. <i>Optics Express</i> , 2012 , 20, 17667-77	3.3	185
464	Surface plasmon polariton absorption modulator. <i>Optics Express</i> , 2011 , 19, 8855-69	3.3	176

463	High-speed plasmonic modulator in a single metal layer. Science, 2017, 358, 630-632	33.3	155
462	Large Pockels effect in micro- and nanostructured barium titanate integrated on silicon. <i>Nature Materials</i> , 2019 , 18, 42-47	27	155
461	Femtojoule electro-optic modulation using a siliconBrganic hybrid device. <i>Light: Science and Applications</i> , 2015 , 4, e255-e255	16.7	136
460	Study of all-optical XOR using Mach-Zehnder Interferometer and differential scheme. <i>IEEE Journal of Quantum Electronics</i> , 2004 , 40, 703-710	2	136
459	42.7 Gbit/s electro-optic modulator in silicon technology. <i>Optics Express</i> , 2011 , 19, 11841-51	3.3	133
458	Simple all-optical FFT scheme enabling Tbit/s real-time signal processing. <i>Optics Express</i> , 2010 , 18, 9324	1-403	129
457	On-Chip Narrowband Thermal Emitter for Mid-IR Optical Gas Sensing. ACS Photonics, 2017, 4, 1371-138	06.3	119
456	Real-time Nyquist pulse generation beyond 100 Gbit/s and its relation to OFDM. <i>Optics Express</i> , 2012 , 20, 317-37	3.3	117
455	Performance tradeoff between lateral and interdigitated doping patterns for high speed carrier-depletion based silicon modulators. <i>Optics Express</i> , 2012 , 20, 12926-38	3.3	112
454	Silicon Organic Hybrid Technology A Platform for Practical Nonlinear Optics. <i>Proceedings of the IEEE</i> , 2009 , 97, 1304-1316	14.3	111
453	Mapping the university technology transfer process. <i>Journal of Business Venturing</i> , 1997 , 12, 423-434	8.3	110
452	Single-Laser 325 T bit/s Nyquist WDM Transmission. <i>Journal of Optical Communications and Networking</i> , 2012 , 4, 715	4.1	106
451	High-Speed, Low Drive-Voltage Silicon-Organic Hybrid Modulator Based on a Binary-Chromophore Electro-Optic Material. <i>Journal of Lightwave Technology</i> , 2014 , 32, 2726-2734	4	101
450	Silicon-Organic Hybrid Electro-Optical Devices. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2013 , 19, 114-126	3.8	101
449	Waveguide-integrated van der Waals heterostructure photodetector at telecom wavelengths with high speed and high responsivity. <i>Nature Nanotechnology</i> , 2020 , 15, 118-124	28.7	100
448	Reduced propagation loss in silicon strip and slot waveguides coated by atomic layer deposition. <i>Optics Express</i> , 2011 , 19, 11529-38	3.3	100
447	Acceleration of gain recovery in semiconductor optical amplifiers by optical injection near transparency wavelength. <i>IEEE Photonics Technology Letters</i> , 2002 , 14, 12-14	2.2	99
446	Plasmonically Enhanced Graphene Photodetector Featuring 100 Gbit/s Data Reception, High Responsivity, and Compact Size. <i>ACS Photonics</i> , 2019 , 6, 154-161	6.3	95

445	100 Gbit/s all-optical wavelength conversion with integrated SOA delayed-interference configuration. <i>Electronics Letters</i> , 2000 , 36, 1129	1.1	93
444	Real-Time Software-Defined Multiformat Transmitter Generating 64QAM at 28 GBd. <i>IEEE Photonics Technology Letters</i> , 2010 , 22, 1601-1603	2.2	92
443	Plasmonic modulator with >170 GHz bandwidth demonstrated at 100 GBd NRZ. <i>Optics Express</i> , 2017 , 25, 1762-1768	3.3	91
442	Slow and fast dynamics of gain and phase in a quantum dot semiconductor optical amplifier. <i>Optics Express</i> , 2008 , 16, 170-8	3.3	91
441	100 GHz Plasmonic Photodetector. ACS Photonics, 2018, 5, 3291-3297	6.3	91
440	Silicon-Organic Hybrid (SOH) and Plasmonic-Organic Hybrid (POH) Integration. <i>Journal of Lightwave Technology</i> , 2016 , 34, 256-268	4	89
439	Silicon Drganic and Plasmonic Drganic Hybrid Photonics. ACS Photonics, 2017, 4, 1576-1590	6.3	85
438	Atomic Scale Plasmonic Switch. <i>Nano Letters</i> , 2016 , 16, 709-14	11.5	84
437	Multimode interference couplers with tunable power splitting ratios. <i>Journal of Lightwave Technology</i> , 2001 , 19, 700-707	4	82
436	All-optical wavelength conversion using a pulse reformatting optical filter. <i>Journal of Lightwave Technology</i> , 2004 , 22, 186-192	4	79
435	Dispersion Relation and Loss of Subwavelength Confined Mode of Metal-Dielectric-Gap Optical Waveguides. <i>IEEE Photonics Technology Letters</i> , 2009 , 21, 362-364	2.2	78
434	Optical properties of highly nonlinear silicon-organic hybrid (SOH) waveguide geometries. <i>Optics Express</i> , 2009 , 17, 17357-68	3.3	77
433	Radiation Modes and Roughness Loss in High Index-Contrast Waveguides. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2006 , 12, 1306-1321	3.8	77
432	Nonlinearities of organic electro-optic materials in nanoscale slots and implications for the optimum modulator design. <i>Optics Express</i> , 2017 , 25, 2627-2653	3.3	75
431	Silicon-organic hybrid (SOH) IQ modulator using the linear electro-optic effect for transmitting 16QAM at 112 Gbit/s. <i>Optics Express</i> , 2013 , 21, 13219-27	3.3	75
430	Demonstration of 42.7-Gb/s DPSK receiver with 45 photons/bit sensitivity. <i>IEEE Photonics Technology Letters</i> , 2003 , 15, 99-101	2.2	75
429	Silicon-organic hybrid (SOH) frequency comb sources for terabit/s data transmission. <i>Optics Express</i> , 2014 , 22, 3629-37	3.3	72
428	500 GHz plasmonic Mach-Zehnder modulator enabling sub-THz microwave photonics. <i>APL Photonics</i> , 2019 , 4, 056106	5.2	71

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427	Multimode interference couplers for the conversion and combining of zero- and first-order modes. Journal of Lightwave Technology, 1998 , 16, 1228-1239	4	70	
426	The plasmonic memristor: a latching optical switch. <i>Optica</i> , 2014 , 1, 198	8.6	69	
425	Measurement of eye diagrams and constellation diagrams of optical sources using linear optics and waveguide technology. <i>Journal of Lightwave Technology</i> , 2005 , 23, 178-186	4	69	
424	Theoretical and experimental analysis of the structural pattern responsible for the iridescence of Morpho butterflies. <i>Optics Express</i> , 2013 , 21, 14351-61	3.3	64	
423	Plasmonic Communications: Light on a Wire. Optics and Photonics News, 2013, 24, 28	1.9	62	
422	Low-Loss Silicon Strip-to-Slot Mode Converters. <i>IEEE Photonics Journal</i> , 2013 , 5, 2200409-2200409	1.8	60	
421	512QAM Nyquist sinc-pulse transmission at 54 Gbit/s in an optical bandwidth of 3 GHz. <i>Optics Express</i> , 2012 , 20, 6439-47	3.3	60	
420	Quality metrics for optical signals: Eye diagram, Q-factor, OSNR, EVM and BER 2012 ,		59	
419	Low Power Machdehnder Modulator in Silicon-Organic Hybrid Technology. <i>IEEE Photonics Technology Letters</i> , 2013 , 25, 1226-1229	2.2	58	
418	. IEEE Journal of Selected Topics in Quantum Electronics, 2015 , 21, 276-283	3.8	57	
417	1-Tb/s (6 x 170.6 Gb/s) transmission over 2000-km NZDF using OTDM and RZ-DPSK format. <i>IEEE Photonics Technology Letters</i> , 2003 , 15, 1618-1620	2.2	57	
416	. Journal of Lightwave Technology, 2017 , 35, 4663-4669	4	56	
415	108 Gbit/s Plasmonic Mach Zehnder Modulator with > 70-GHz Electrical Bandwidth. <i>Journal of Lightwave Technology</i> , 2016 , 34, 393-400	4	55	
414	Direct Conversion of Free Space Millimeter Waves to Optical Domain by Plasmonic Modulator Antenna. <i>Nano Letters</i> , 2015 , 15, 8342-6	11.5	54	
413	Silicon-organic hybrid phase shifter based on a slot waveguide with a liquid-crystal cladding. <i>Optics Express</i> , 2012 , 20, 15359-76	3.3	54	
412	Silicon-plasmonic internal-photoemission detector for 40 Gbit/s data reception. <i>Optica</i> , 2016 , 3, 741	8.6	54	
411	Plasmonic IQ modulators with attojoule per bit electrical energy consumption. <i>Nature Communications</i> , 2019 , 10, 1694	17.4	53	
410	25 x 40-Gb/s copolarized DPSK transmission over 12 x 100-km NZDF with 50-GHz channel spacing. <i>IEEE Photonics Technology Letters</i> , 2003 , 15, 467-469	2.2	53	

409	Nonlinear Optics in Telecommunications. Advanced Texts in Physics, 2004,		53
408	All-optical logic XOR using differential scheme and Mach-Zehnder interferometer. <i>Electronics Letters</i> , 2002 , 38, 1271	1.1	52
407	Continuously tunable true-time delays with ultra-low settling time. <i>Optics Express</i> , 2015 , 23, 6952-64	3.3	50
406	Effect of Rigid Bridge-Protection Units, Quadrupolar Interactions, and Blending in Organic Electro-Optic Chromophores. <i>Chemistry of Materials</i> , 2017 , 29, 6457-6471	9.6	50
405	Novel 3R regenerator based on semiconductor optical amplifier delayed-interference configuration. <i>IEEE Photonics Technology Letters</i> , 2001 , 13, 860-862	2.2	50
404	Plasmonic-organic hybrid (POH) modulators for OOK and BPSK signaling at 40 Gbit/s. <i>Optics Express</i> , 2015 , 23, 9938-46	3.3	49
403	Fast MoTe2 Waveguide Photodetector with High Sensitivity at Telecommunication Wavelengths. <i>ACS Photonics</i> , 2018 , 5, 1846-1852	6.3	49
402	. Proceedings of the IEEE, 2016 , 104, 2362-2379	14.3	49
401	. IEEE Communications Surveys and Tutorials, 2018 , 20, 2758-2783	37.1	49
400	Low-power silicon-organic hybrid (SOH) modulators for advanced modulation formats. <i>Optics Express</i> , 2014 , 22, 29927-36	3.3	49
399	High aspect ratio gratings for X-ray phase contrast imaging 2012 ,		49
398	Spatial mode filters realized with multimode interference couplers. <i>Optics Letters</i> , 1996 , 21, 836-8	3	47
397	Plasmonic Photodetectors. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-13	3.8	47
396	Temporal Dynamics of the Alpha Factor in Semiconductor Optical Amplifiers. <i>Journal of Lightwave Technology</i> , 2007 , 25, 891-900	4	46
395	All-optical space switches with gain and principally ideal extinction ratios. <i>IEEE Journal of Quantum Electronics</i> , 1998 , 34, 622-633	2	45
394	Cascadability and Regenerative Properties of SOA All-Optical DPSK Wavelength Converters. <i>IEEE Photonics Technology Letters</i> , 2006 , 18, 1970-1972	2.2	45
393	. IEEE Photonics Technology Letters, 2013 , 25, 701-704	2.2	44
392	Material gain of bulk 1.55 fh InGaAsP/InP semiconductor optical amplifiers approximated by a polynomial model. <i>Journal of Applied Physics</i> , 2000 , 87, 618-620	2.5	44

391	40 Gbit transmission and cascaded all-optical wavelength conversion over 1 000 000 km. <i>Electronics Letters</i> , 2002 , 38, 890	1.1	43	
390	An OFDMA-based optical access network architecture exhibiting ultra-high capacity and wireline-wireless convergence 2012 , 50, 71-78		42	
389	Digital Plasmonic Absorption Modulator Exploiting Epsilon-Near-Zero in Transparent Conducting Oxides. <i>IEEE Photonics Journal</i> , 2016 , 8, 1-13	1.8	41	•
388	Technological challenges on the road toward transparent networking. <i>Journal of Optical Networking</i> , 2008 , 7, 321		40	
387	Optically powered fiber networks. <i>Optics Express</i> , 2008 , 16, 21821-34	3.3	40	
386	Pulse-Shaping With Digital, Electrical, and Optical Filters Comparison. <i>Journal of Lightwave Technology</i> , 2013 , 31, 2570-2577	4	39	
385	High speed plasmonic modulator array enabling dense optical interconnect solutions. <i>Optics Express</i> , 2015 , 23, 29746-57	3.3	39	
384	High spectral density long-haul 40-Gb/s transmission using CSRZ-DPSK format. <i>Journal of Lightwave Technology</i> , 2004 , 22, 208-214	4	39	
383	160 Gbits SOA all-optical wavelength converter and assessment of its regenerative properties. <i>Electronics Letters</i> , 2004 , 40, 554	1.1	39	
382	40 GBd 16QAM Signaling at 160 Gb/s in a Silicon-Organic Hybrid Modulator. <i>Journal of Lightwave Technology</i> , 2015 , 33, 1210-1216	4	38	
381	Nano-opto-electro-mechanical switches operated at CMOS-level voltages. <i>Science</i> , 2019 , 366, 860-864	33.3	38	
380	Real-time OFDM transmitter beyond 100 Gbit/s. <i>Optics Express</i> , 2011 , 19, 12740-9	3.3	37	
379	10-Gb/s RZ-DPSK transmitter using a saturated SOA as a power booster and limiting amplifier. <i>IEEE Photonics Technology Letters</i> , 2004 , 16, 1582-1584	2.2	37	
378	Harnessing nonlinearities near material absorption resonances for reducing losses in plasmonic modulators. <i>Optical Materials Express</i> , 2017 , 7, 2168	2.6	36	
377	Compensation of intrachannel nonlinearities in 40-Gb/s pseudolinear systems using optical-phase conjugation. <i>Journal of Lightwave Technology</i> , 2005 , 23, 172-177	4	36	
376	40-Gb/s return-to-zero alternate-mark-inversion (RZ-AMI) transmission over 2000 km. <i>IEEE Photonics Technology Letters</i> , 2003 , 15, 766-768	2.2	36	
375	An Optically Powered Video Camera Link. IEEE Photonics Technology Letters, 2008, 20, 39-41	2.2	35	
374	All-optical Mach-Zehnder interferometer wavelength converters and switches with integrated data- and control-signal separation scheme. <i>Journal of Lightwave Technology</i> , 1999 , 17, 1056-1066	4	34	

373	Microwave plasmonic mixer in a transparent fibre-wireless link. <i>Nature Photonics</i> , 2018 , 12, 749-753	33.9	34
372	. IEEE Journal of Selected Topics in Quantum Electronics, 2012 , 18, 689-700	3.8	33
371	Second-order nonlinear optical metamaterials: ABC-type nanolaminates. <i>Applied Physics Letters</i> , 2015 , 107, 121903	3.4	33
370	The Input Power Dynamic Range of a Semiconductor Optical Amplifier and Its Relevance for Access Network Applications. <i>IEEE Photonics Journal</i> , 2011 , 3, 1039-1053	1.8	33
369	2.5 Tb/s (64/spl times/42.7 Gb/s) transmission over 40/spl times/100 km NZDSF using RZ-DPSK format and all-Raman-amplified spans		33
368	Compact Mid-Infrared Gas Sensing Enabled by an All-Metamaterial Design. <i>Nano Letters</i> , 2020 , 20, 4169	- 4 1.ʒ6	32
367	. Journal of Lightwave Technology, 2004 , 22, 180-185	4	32
366	40 Gbit/s pseudo-linear transmission over one million kilometers		32
365	DAC-Less Amplifier-Less Generation and Transmission of QAM Signals Using Sub-Volt Silicon-Organic Hybrid Modulators. <i>Journal of Lightwave Technology</i> , 2015 , 33, 1425-1432	4	31
364	Silicon-Organic Hybrid MZI Modulator Generating OOK, BPSK and 8-ASK Signals for Up to 84 Gbit/s. <i>IEEE Photonics Journal</i> , 2013 , 5, 6600907-6600907	1.8	31
363	Second-order nonlinear silicon-organic hybrid waveguides. <i>Optics Express</i> , 2012 , 20, 20506-15	3.3	31
362	Systematic investigation into the influence of growth conditions on InAs/GaAs quantum dot properties. <i>Journal of Applied Physics</i> , 2007 , 102, 073511	2.5	31
361	Return-to-zero modulator using a single NRZ drive signal and an optical delay interferometer. <i>IEEE Photonics Technology Letters</i> , 2001 , 13, 1298-1300	2.2	31
360	Digitally Controlled Phase Shifter Using an SOI Slot Waveguide With Liquid Crystal Infiltration. <i>IEEE Photonics Technology Letters</i> , 2015 , 27, 1269-1272	2.2	29
359	A monolithic bipolar CMOS electronicplasmonic high-speed transmitter. <i>Nature Electronics</i> , 2020 , 3, 338-345	28.4	29
358	Real-time OFDM or Nyquist pulse generationwhich performs better with limited resources?. <i>Optics Express</i> , 2012 , 20, B543-51	3.3	29
357	Influence of InGaAs cap layers with different In concentration on the properties of InGaAs quantum dots. <i>Journal of Applied Physics</i> , 2008 , 103, 083532	2.5	29
356	Compact and ultra-efficient broadband plasmonic terahertz field detector. <i>Nature Communications</i> , 2019 , 10, 5550	17.4	29

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355	Optimization of Plasmonic-Organic Hybrid Electro-Optics. <i>Journal of Lightwave Technology</i> , 2018 , 36, 5036-5047	4	28	
354	80 Gb/s wavelength conversion using a quantum-dot semiconductor optical amplifier and optical filtering. <i>Optics Express</i> , 2011 , 19, 5134-42	3.3	28	
353	Design and implementation of wavelength-flexible network nodes. <i>Journal of Lightwave Technology</i> , 2003 , 21, 648-663	4	28	
352	All-optical wavelength conversion between 10 and 100 Gb/s with SOA delayed-interference configuration. <i>Optical and Quantum Electronics</i> , 2001 , 33, 939-952	2.4	28	
351	All-optical wavelength conversion and broadcasting to eight separate channels by a single semiconductor optical amplifier delay interferometer		28	
350	. IEEE Journal of Selected Topics in Quantum Electronics, 2014 , 20, 503-511	3.8	27	
349	Pattern Effect Removal Technique for Semiconductor-Optical-Amplifier-Based Wavelength Conversion. <i>IEEE Photonics Technology Letters</i> , 2007 , 19, 1955-1957	2.2	27	
348	Efficient modulation cancellation using reflective SOAs. <i>Optics Express</i> , 2012 , 20, B587-94	3.3	26	
347	Single Source Optical OFDM Transmitter and Optical FFT Receiver Demonstrated at Line Rates of 5.4 and 10.8 Tbit/s 2010 ,		26	
346	Using carrier-depletion silicon modulators for optical power monitoring. <i>Optics Letters</i> , 2012 , 37, 4681	-33	25	
345	120 GBd plasmonic Mach-Zehnder modulator with a novel differential electrode design operated at a peak-to-peak drive voltage of 178 mV. <i>Optics Express</i> , 2019 , 27, 16823-16832	3.3	25	
344	Lasing in silicon-organic hybrid waveguides. <i>Nature Communications</i> , 2016 , 7, 10864	17.4	24	
343	Plasmonic Ferroelectric Modulators. <i>Journal of Lightwave Technology</i> , 2019 , 37, 281-290	4	24	
342	Atomic Scale Photodetection Enabled by a Memristive Junction. ACS Nano, 2018, 12, 6706-6713	16.7	24	
341	All-Fiberized Dispersion-Managed Multichannel Regeneration at 43 Gb/s. <i>IEEE Photonics Technology Letters</i> , 2008 , 20, 1854-1856	2.2	23	
340	Experimental Demonstration of a Statistical OFDM-PON With Multiband ONUs and Elastic Bandwidth Allocation [Invited]. <i>Journal of Optical Communications and Networking</i> , 2015 , 7, A73	4.1	22	
339	Search-Based Testing of Ajax Web Applications 2009 ,		22	
338	Ultra compact electrochemical metallization cells offering reproducible atomic scale memristive switching. <i>Communications Physics</i> , 2019 , 2,	5.4	21	

337	Efficient Multiterminal Spectrum Splitting via a Nanowire Array Solar Cell. ACS Photonics, 2015, 2, 1284-	1288	21
336	Ultra-High-Speed 2:1 Digital Selector and Plasmonic Modulator IM/DD Transmitter Operating at 222 GBaud for Intra-Datacenter Applications. <i>Journal of Lightwave Technology</i> , 2020 , 38, 2734-2739	4	21
335	Three-Dimensional Phase Modulator at Telecom Wavelength Acting as a Terahertz Detector with an Electro-Optic Bandwidth of 1.25 Terahertz. <i>ACS Photonics</i> , 2018 , 5, 1398-1403	6.3	21
334	Monolithic GaAs Electro-Optic IQ Modulator Demonstrated at 150 Gbit/s With 64QAM. <i>Journal of Lightwave Technology</i> , 2014 , 32, 760-765	4	21
333	Optical absorption in silicon layers in the presence of charge inversion/accumulation or ion implantation. <i>Applied Physics Letters</i> , 2013 , 103, 051104	3.4	21
332	Linear semiconductor optical amplifiers for amplification of advanced modulation formats. <i>Optics Express</i> , 2012 , 20, 9657-72	3.3	21
331	Optical /spl pi//2-DPSK and its tolerance to filtering and polarization-mode dispersion. <i>IEEE Photonics Technology Letters</i> , 2003 , 15, 1639-1641	2.2	21
330	Integrated optical frequency shifter in silicon-organic hybrid (SOH) technology. <i>Optics Express</i> , 2016 , 24, 11694-707	3.3	21
329	. IEEE Photonics Journal, 2019 , 11, 1-9	1.8	20
328	Corrections to Error Vector Magnitude as a Performance Measure for Advanced Modulation Formats[Jan 1, 2012 61-63]. <i>IEEE Photonics Technology Letters</i> , 2012 , 24, 2198-2198	2.2	20
327	Transmission of an ASK-labeled RZ-DPSK signal and label erasure using a saturated SOA. <i>IEEE Photonics Technology Letters</i> , 2004 , 16, 1594-1596	2.2	20
326	All-optical XOR operation of 40 Gbit phase-shift-keyed data using four-wave mixing in semiconductor optical amplifier. <i>Electronics Letters</i> , 2004 , 40, 496	1.1	20
325	Nonblocking all-optical cross connect based on regenerative all-optical wavelength converter in a transparent demonstration over 42 nodes and 16800 km. <i>Journal of Lightwave Technology</i> , 2003 , 21, 2863-2870	4	20
324	Hot embossing and thermoforming of biodegradable three-dimensional wood structures. <i>RSC Advances</i> , 2013 , 3, 20060	3.7	19
323	Reliable and lightning-safe monitoring of wind turbine rotor blades using optically powered sensors. <i>Wind Energy</i> , 2017 , 20, 345-360	3.4	18
322	Photonic-to-plasmonic mode converter. <i>Optics Letters</i> , 2014 , 39, 3488-91	3	18
321	100 Gbit/s Wireless Link with mm-Wave Photonics 2013 ,		18
320	Free-space optical delay interferometer with tunable delay and phase. Optics Express, 2011, 19, 11654-6	6 6.3	18

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319	Non-reciprocal transmission and Schmitt trigger operation in strongly modulated asymmetric WBGs. <i>Optics Express</i> , 2006 , 14, 12782-93	3.3	18
318	Deep learning based digital backpropagation demonstrating SNR gain at low complexity in a 1200 km transmission link. <i>Optics Express</i> , 2020 , 28, 29318-29334	3.3	18
317	Plasmonic phased array feeder enabling ultra-fast beam steering at millimeter waves. <i>Optics Express</i> , 2016 , 24, 25608-25618	3.3	18
316	Optical memristive switches. <i>Journal of Electroceramics</i> , 2017 , 39, 239-250	1.5	17
315	. IEEE Journal of Quantum Electronics, 2016 , 52, 1-8	2	17
314	Quantum dot SOA input power dynamic range improvement for differential-phase encoded signals. <i>Optics Express</i> , 2010 , 18, 6270-6	3.3	17
313	Ideal Bend Contour Trajectories for Single-Mode Operation of Low-Loss Overmoded Waveguides. <i>IEEE Photonics Technology Letters</i> , 2007 , 19, 819-821	2.2	17
312	Ultra-Compact Terabit Plasmonic Modulator Array. <i>Journal of Lightwave Technology</i> , 2019 , 37, 1484-149	94	17
311	OFDM/WDM PON With Laserless, Colorless 1 Gb/s ONUs Based on Si-PIC and Slow IC. <i>Journal of Optical Communications and Networking</i> , 2014 , 6, 225	4.1	16
310	High-Quality Optical Frequency Comb by Spectral Slicing of Spectra Broadened by SPM. <i>IEEE Photonics Journal</i> , 2013 , 5, 7201011-7201011	1.8	16
309	High-efficiency spectrum splitting for solar photovoltaics. <i>Solar Energy Materials and Solar Cells</i> , 2015 , 136, 120-126	6.4	16
308	Amplification of advanced modulation formats with a semiconductor optical amplifier cascade. <i>Optics Express</i> , 2014 , 22, 17854-71	3.3	16
307	A simple and rigorous verification technique for nonlinear fdtd algorithms by optical parametric four-wave mixing. <i>Microwave and Optical Technology Letters</i> , 2006 , 48, 88-91	1.2	16
306	Ultrahigh-speed optical phase correlated data signals. IEEE Photonics Technology Letters, 2003, 15, 1597	7- <u>1</u> 1. 5 99	16
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200	Silicon-Organic Hybrid (SOH) and Plasmonic-Organic Hybrid (POH) Integration 2015,		4	
199	Ultra-compact plasmonic IQ-modulator 2015 ,		4	
198	High-Speed Silicon-Organic Hybrid (SOH) Modulators with 230 pm/V Electro-Optic Coefficient Using Advanced Materials 2014 ,		4	
197	Doping Geometries for 40G Carrier-Depletion-Based Silicon Optical Modulators 2012 ,		4	
196	Optical OFDM and Nyquist Multiplexing 2013, 381-432		4	
195	A novel system on chip for software-defined, high-speed OFDM signal processing 2013,		4	
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185	Microresonator-Based Optical Frequency Combs for High-Bitrate WDM Data Transmission 2012,	4
184	Plasmonic-MZM-based Short-Reach Transmission up to 10 km Supporting >304 GBd Polybinary or 432 Gbit/s PAM-8 Signaling 2021 ,	4
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178	Demystification of Self-seeded WDM Access 2015,	3
177	High-speed and low-power silicon-organic hybrid modulators for advanced modulation formats 2015 ,	3
176	O-Band 10-Gb/s Operation of a Reflective Semiconductor Optical Amplifier Based Self-Seeded Transmitter for Optical Access Applications. <i>Fiber and Integrated Optics</i> , 2014 , 33, 173-183	3

175	Terabit/s data transmission using optical frequency combs 2013,		3
174	First Monolithic GaAs IQ Electro-optic Modulator, Demonstrated at 150 Gbit/s with 64-QAM 2013 ,		3
173	40 Gbit/s silicon-organic hybrid (SOH) phase modulator 2010 ,		3
172	Saturation characteristics of InGaAsP-InP bulk SOA 2010 ,		3
171	100 Gbit/s electro-optic modulator and 56 Gbit/s wavelength converter for DQPSK data in silicon-organic hybrid (SOH) technology 2010 ,		3
170	Photonic Waveguide Bonds 🖪 Novel Concept for Chip-to-Chip Interconnects 2011 ,		3
169	Novel Optical Fast Fourier Transform Scheme Enabling Real-Time OFDM Processing at 392 Gbit/s and Beyond 2010 ,		3
168	Dynamic analysis of MZI-SOA all optical switches for balanced switching 1997,		3
167	Performance Evaluation of Wavelength Conversion at 160 Gbit/s using XGM in Quantum-Dot Semiconductor Optical Amplifiers in MZI configuration 2007 ,		3
166	Optically Powered Platform with Mb/s Transmission over a Single Fiber 2006,		3
165	New Approaches to Perform All-Optical Signal Regeneration 2007,		3
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163	Regenerative Properties of Bulk and Quantum Dot SOA Based All-Optical Mach-Zehnder Interferometer DPSK Wavelength Converters 2006 ,		3
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158	Antenna Coupled Plasmonic Modulator 2015 ,		3

157	All-Optical Wavelength Conversion at 42.7 Gbit/s in a 4 mm Long Silicon-Organic Hybrid Waveguide 2009 ,		3
156	150 Gbit/s Real-Time Nyquist Pulse Transmission Over 150 km SSMF Enhanced by DSP with Dynamic Precision 2012 ,		3
155	Bi-directional Ultra-dense Polarization-diverse OFDM/WDM PON with Laserless Colorless 1Gb/s ONUs Based on Si PICs and 2013 ,		3
154	Plasmonics for Communications 2018,		3
153	Software-Defined Multi-Format Transmitter with Real-Time Signal Processing for up to 160 Gbit/s 2010 ,		3
152	Plasmonic Racetrack Modulator Transmitting 220 Gbit/s OOK and 408 Gbit/s 8PAM 2021 ,		3
151	High Speed Photoconductive Plasmonic Germanium Detector 2017,		3
150	Field Trial of WDM-OTDM Transmultiplexing employing Photonic Switch Fabric-based Buffer-less Bit-interleaved Data Grooming and All-Optical Regeneration 2009 ,		3
149	Remote Heterodyne Reception of OFDM-QPSK as Downlink-Solution for Future Access Networks 2012 ,		3
148	First Silicon-Organic Hybrid Laser at Telecommunication Wavelengths 2012 ,		3
147	Flexible WDM-PON with Nyquist-FDM and 31.25 Gbit/s per Wavelength Channel Using Colorless, Low-Speed ONUs 2013 ,		3
146	Electromagnetic and Semiconductor Modeling of Scanning Microwave Microscopy Setups. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , 2020 , 5, 209-216	1.5	3
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142	Time-domain Coupled Full Maxwell- and Drift-Diffusion-Solver for Simulating Scanning Microwave Microscopy of Semiconductors 2019 ,		3
141	Design and synthesis of chromophores with enhanced electro-optic activities in both bulk and plasmonic-organic hybrid devices. <i>Materials Horizons</i> , 2021 ,	14.4	3
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136	Dense Plasmonic Mach-Zehnder Modulator Array for High-Speed Optical Interconnects 2015 ,		2
135	MMP Simulation of Plasmonic Particles on Substrate Under E-Beam Illumination. <i>Springer Series on Atomic, Optical, and Plasma Physics</i> , 2018 , 121-145	0.4	2
134	Femtojoule modulation and frequency comb generation in silicon-organic hybrid (SOH) devices 2014 ,		2
133	Colorless Self-Seeded Fiber Cavity Laser Transmitter for WDM-PON 2014 ,		2
132	EVM as new quality metric for optical modulation analysis 2013,		2
131	Self-Seeded RSOA Fiber Cavity Laser and the Role of Rayleigh Backscattering An Analytical Model. <i>Journal of Lightwave Technology</i> , 2017 , 35, 4845-4850	4	2
130	PAM-8 108 Gbit/s transmission using an 850nm multi-mode VCSEL 2017 ,		2
129	FPGA-based Real-Time Receivers for Nyquist-FDM 2017 ,		2
128	Bit- and Power-Loading Comparative Study on Maximizing the Capacity of RSOA Based Colorless DMT Transmitters. <i>Applied Sciences (Switzerland)</i> , 2017 , 7, 999	2.6	2
127	Ultra-dense, single-wavelength DFT-spread OFDM PON with laserless 1 Gb/s ONU at only 300 MBd per spectral group 2014 ,		2
126	Direct digital control of an efficient silicon+liquid crystal phase shifter 2014,		2
125	Ultra-short silicon-organic hybrid (SOH) modulator for bidirectional polarization-independent operation 2014 ,		2
124	10 GBd SOH modulator directly driven by an FPGA without electrical amplification 2014 ,		2
123	Terabit/s optical transmission using chip-scale frequency comb sources 2014,		2
122	Latching Plasmonic Switch with High Extinction Ratio 2014,		2

121	Flexible real-time transmitter at 10 Gbit/s for SCFDMA PONs focusing on low-cost ONUs 2014,		2
120	Linear Semiconductor Optical Amplifiers. Springer Series in Optical Sciences, 2012, 511-571	0.5	2
119	4 Gbit/s Real-Time OFDM Signal Generation with Transmission over 400 km and Preamble-less Reception 2012 ,		2
118	Silicon-organic hybrid devices 2013 ,		2
117	Photonic wire bonding: connecting nanophotonic circuits across chip boundaries 2013,		2
116	Silicon-Organic Hybrid (SOH) Modulator Generating up to 84 Gbit/s BPSK and M-ASK Signals 2013 ,		2
115	Stacking PS-QPSK and 64PPM for Long-Range Free-Space Transmission 2013 ,		2
114	A surface plasmon polariton absorption modulator 2011 ,		2
113	Reconfigurable Hardware for Power-over-Fiber Applications 2010,		2
112	Linear and nonlinear semiconductor optical amplifiers 2010,		2
111	Quality Metrics in Optical Modulation Analysis: EVM and its relation to Q-factor, OSNR, and BER 2012 ,		2
110	All-optical wavelength conversion using cross-phase modulation at 42.7 Gbit/s in silicon-organic hybrid (SOH) waveguides 2009 ,		2
109	All-Optical Wavelength Conversion of 56 Gbit/s NRZ-DQPSK Signals in Silicon-Organic Hybrid Strip Waveguides 2010 ,		2
108	40 Gbit/s asynchronous digital optical regenerator. <i>Optics Express</i> , 2008 , 16, 18889-94	3.3	2
107	Multi-wavelength all-optical regeneration 2008,		2
106	An Interferometric Configuration for Performing Cross-Gain Modulation with Improved Signal Quality 2008 ,		2
105	Highly nonlinear silicon photonics slot waveguides without free carrier absorption related speed-limitations 2008 ,		2
104	Multi-Wavelength Regenerative Amplification Based on Quantum-Dot Semiconductor Optical Amplifiers 2007 ,		2

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103	Semiconductor Optical Amplifer-Based Devices for All-Optical High-Speed Wavelength Conversion 2001 , OWA1		2
102	Cascadable MZI all-optical switch with separate ports for data- and control-signals		2
101	Quality Metrics in Optical Modulation Analysis: EVM and its relation to Q-factor, OSNR, and BER 2012 ,		2
100	Atomic Photodetection 2016 ,		2
99	Light Emission from a Waveguide Integrated MOS Tunnel Junction 2019,		2
98	500 GHz Plasmonic Mach-Zehnder Modulator 2019 ,		2
97	Dielectric Layers in Plasmonic-Organic Hybrid Modulators 2018 ,		2
96	Low-Loss Photonic Wire Bond Interconnects Enabling 5 TBit/s Data Transmission 2012,		2
95	Colorless Low-Cost RSOA Based Transmitters Optimized for Highest Capacity Through Bit- and Power-Loaded DMT 2016 ,		2
94	Alamouti Code against PDL in Polarization Multiplexed Systems 2011 ,		2
93	Transparent Optical-THz-Optical Link Transmission over 5/115 m at 240/190 Gbit/s Enabled by Plasmonics 2021 ,		2
92	Traceable Power Measurement of LTE Signals 2015 ,		2
91	Direct RF-to-Optical Detection by Plasmonic modulator integrated into a four-leaf-clover antenna 2016 ,		2
90	Effect of Transmitter Impairments on Nyquist-FDM Signals with Increasing Sub-band Granularity 2016 ,		2
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87	Stacking Modulation Formats for Highest-Sensitivity 2014 ,		2
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